

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Facott and Trademark Office Address: COMMASSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,349		12/04/2003	Philip J. Ellerbrock	038190/270534	8600
826	7590	11/09/2005		EXAMINER	
ALSTON &	& BIRD I	LLP	DANG, KHANH		
BANK OF A		A PLAZA STREET, SUITE 400	ART UNIT	PAPER NUMBER	
CHARLOTTE, NC 28280-4000			2111		
				DATE MAILED: 11/00/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Interview Summary	10/728,349	ELLERBROCK ET AL.	
interview duminary	Examiner	Art Unit	
	Khanh Dang	2111	
All participants (applicant, applicant's representative, PTO	personnel):		
(1) <u>Khanh Dang</u> .	(3)		
(2) Mr. Ransom (Atty. of Record).	(4)		
Date of Interview: <u>03 November 2005</u> .			
Type: a)⊠ Telephonic b)□ Video Conference c)□ Personal [copy given to: 1)□ applicant 2	2) applicant's representative		
Exhibit shown or demonstration conducted: d) Yes If Yes, brief description:	e)⊠ No.		
Claim(s) discussed: <u>1</u> .			
Identification of prior art discussed: Karolys and Hanna.			
Agreement with respect to the claims f) was reached. g)□ was not reached. h)⊠ N	I/A.	
Substance of Interview including description of the general reached, or any other comments: <u>See Continuation Sheet</u> .	nature of what was agreed to	if an agreement was	
(A fuller description, if necessary, and a copy of the amend allowable, if available, must be attached. Also, where no coallowable is available, a summary thereof must be attached	opy of the amendments that w		
THE FORMAL WRITTEN REPLY TO THE LAST OFFICE A INTERVIEW. (See MPEP Section 713.04). If a reply to the GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR FORM, WHICHEVER IS LATER, TO FILE A STATEMENT (Summary of Record of Interview requirements on reverse signal of the content of th	last Office action has already THE MAILING DATE OF THIS OF THE SUBSTANCE OF TH	been filed, APPLICANT IS S INTERVIEW SUMMARY	
•	Know 6	romes	
		h Dang Emminer	
Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.	Examiner's sign	ature, if required	

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Mr. Ransom argues, in view of the proposed amendment to claim 1, that claim 1 is not directed to a clock recovery system. Instead, claim 1 is directed to the use of multiple bit rates and automatic switching from one bit rate to another bit rate depending on the bit rate used by a message presented to a receiver. Mr. Ransom also agrees with the Examiner to change the word "possible" (lines 7 and 12 of claim 1) to -- predetermined -- to further define the claim. The Examiner agrees with Mr. Ransom that the proposed amendmens to claim 1 should overcome the current rejections. Mr. Ransom will file an RCE so that the proposed amendments can be entered.

On a side note, the Examiner would like to thank Mr. Ransom for his effort and cooperation to advance prosecution of this application by discussing in length, on behalf of the Applicants, the issues related to the rejections with the Examiner during the 11/03/05 Interview, and proposing amendments to the claim. .

(Examiner/SPE Signature)

	U.S. I	Patent and Tr	ademark Office: U.S. DEPA	ARTMENT OF COMMERCI			
Applicant Initiated Interview Request Form							
Filed:	Ellerbrock et al : 10/727,414, 10/729,560, 10/72 December 4, 2003 NETWORK DEVICE INTERI DATA CHANNELS TO A CO	FACE FO					
Status of A	pplication: Final Rejection						
Tentative P (1) Examin	•	evin Ran	som				
Proposed D	Date and Time of Interview: No	vember 3	3, 2005; 2:00 pm				
	erview Requested: ephonic (2) Personal	(3)	Video Conference	;			
	Be Shown or Demonstrated: ride brief description:		☐ YES ⊠ NO				
	Issues To	Be Discı	ıssed				
Rejections	of application nos. 10/727,414,	10/729,5	660, 10/728,349				
Brief Desci	ription of Arguments to be Prese	ented:					
Please see a	attached documents						
An intervie	w was conducted on the above-	identifie	d application on	<u> </u>			
MPEP § 713. This application this interview	ould be completed by applicant and sul 01). ion will not be delayed from issue beca 7. Therefore, applicant is advised to fil 2) as soon as possible	ause of app	olicant's failure to sub	mit a written record of			

(Applicant's Representative Signature)
CLT01/4762177v1

Appl. No.:
Applicant(s):

10/728,349

Ellerbrock et al.

Filed:

December 4, 2003

Art Unit:

2111

Examiner:

K. Dang

Title:

NETWORK DEVICE INTERFACE FOR DIGITALLY NTERFACING

Confirmation No.: 8600

DATA CHANNELS TO A CONTROLLER VIA NETWORK

Docket No.:

038190/270534

Proposed Amendment:

1. (proposed amended) A method for communicating between a bus controller and at least one data channel via a common digital bus, the method comprising:

communicating between a bus controller and at least one data channel using a first predetermined bit rate;

transmitting a first message from the bus controller to the at least one data channel at a predetermined second bit rate, wherein the predetermined second bit rate is selected from a plurality of possible bit rates that may be used to communicate on the common digital bus;

receiving the first message at the at least one data channel;

analyzing the first message at each of the plurality of possible bit rates upon receipt of the first message by the at least one data channel;

determining from the plurality of possible him rates that the first message is being transmitted at the second predetermined bit rate at which the first message was transmitted upon receipt of the first message by the at least one data channel, where the determination is made independent of a synchronous clock signal from the bus controller; and

transmitting a second message from the at least one data channel to the bus controller in response to the first message at the <u>second</u> same-predetermined bit rate.

Remarks:

Applicant respectfully submits that the Office Action is overlooking a major difference between the claimed invention and the prior art. The Office Action mistakes the claimed invention for a clock recovery system. The present invention is not a clock recovery system. Instead, the claimed invention is directed to an automatic clock rate detection system for a finite number of desirable clock rates. What is considered novel is that claimed invention is a mechanism that automatically switches to another predetermined bus rate when messaging using another bus rate is presented to the receiver.

It should be noted that neither Karolys nor Hanna discloses an automatic detection of multiple bit rates of significant difference (most likely 1000s of percent). Hanna's patent presents a Manchester decoding technique that does not require a PLL nor an asynchronous oversampling receiver to recover a standard 20 bit-time message of a known bit rate within a certain acceptance tolerance (mentioned to be about 10%). Karolys teaches about a bus that connects sensors to a host using a serially multiplexed digital communication bus. Nowhere does Hanna discuss multiple bit rates nor does Karolys cover the idea of bus speeds or bus rate selection, much less a system that is capable of communicating at different bit rates and a mechanism for determining which of the bit rates has been selected for communication.

CLT01/4762166v1